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Response to Office Action of 1/14/04

Atty Docket 117040-54

REMARKS**Claim status**

Claims 1-20 and 22-53 were pending in the case at the time of the Office Action. All stand rejected as being obvious over prior art. Claim 1 is currently amended in the application. Claim 54 is newly added by this amendment. Claims 1-20 and 22-54 are currently pending in the application.

Section 102 rejections

The Examiner's prior rejections based on anticipation by Pantus (US Pat. 5,499,016) ("Pantus '016") have been overcome. There are no present rejections under Section 102.

Section 103 rejections

In the current Office action, claims 1-20, 22-24, 26, 28-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Pantus '016 with Vick (US Pat. 5,473,942) ("Vick '942").

In the current Office action, claims 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pantus '016 and Vick '942 and further in view of Sheffer (U.S. Patent 5,101,194).

Applicants respectfully traverse the foregoing rejection in view of the above pending claims and for reasons set forth hereafter.

Independent claim 1 recites a device for counting passengers on a transportation vehicle. The device comprises a detection device and a counter connected to the detection device. The detection device includes a radiation sensor arrangement, an evaluation unit, a means for individualizing, a means for determining a parameter, and a store. The evaluation unit forms a variation signal which corresponds to a time variation of the radiation detected from an object or person. Changes in the variation signal over time are caused by movement of the detected object or person. The means for individualizing is connected to the evaluation unit and obtains information individualizing an object or person in the form of a characteristic parameter. Such

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individualizing means allows the device to distinguish between different persons and to identify a same person at differing times (e.g., when entering a vehicle, and when exiting a vehicle).

It is respectfully submitted that neither Pantus '016 nor Vick '942, nor the combination of the two teach or suggest the claimed invention. Specifically, Pantus '016 and Vick '942 do not teach or suggest "forming a variation signal" or "a means for individualizing that is connected to the evaluation unit and that obtains information individualizing the object or person".

Instead, Pantus '016 describes an obstruction resistant alarm system for detecting the presence of an intruder. (Abstract) Pantus '016 uses a simple window comparator 31 (Fig. 6) to determine if the peak of a detected signal is within a certain range. If not, an alarm is activated. A detected signal falling within the window of the comparator 31 corresponds to a normal state (i.e., a non-alarm state), and a detected signal falling outside of the window corresponds to an intruder state (i.e., an alarm state) where an alarm is activated. (column 6, lines 13-18) Pantus '016 does not teach or suggest generating a variation signal over time or generating a characteristic parameter that individualizes an object or person as does the claimed invention. As a result, the system of Pantus '016 does not allow for discrimination between one intruder and another intruder, or to identify an intruder at a first time and then identify the same intruder again at a later, second time. Pantus '016 describes distinguishing only between a non-alarm state and an alarm state. One intruder is the same as any other intruder to the system of Pantus '016. However, in the claimed invention, one person or object is discerned from another person or object via formation of a characteristic parameter.

Vick '942 describes a device and method for locating and counting insects. When an insect emits a sound, a first acoustic sensor detects the sound at a first time and a second acoustic sensor detects the sound at a second, later time due to the fact that there is a longer transit path for the sound to travel between the insect and the second sensor than there is between the insect and the first sensor. The difference in the first time and the second time is determined and used to define a spatial plane in which the insect is located. (column 5, lines 9-14) Multiple planes corresponding to multiple insects are located and the number of insects are equated to the number of planes (i.e., the insects are effectively counted). (column 3, Summary) Even though Vick '942 describes that the device and method of Vick '942 can spatially discriminate between different insects (i.e., insects in different planes), Vick '942 does not teach or suggest generating

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a variation signal over time or generating a characteristic parameter that individualizes an object or person as does the claimed invention. Vick '942 describes generating a single time difference value (i.e., the difference in the first time and the second time, not a time variation signal) and determines a plane in which the insect is located. Vick '942 does not determine motion (i.e., speed or direction) of an insect, only detection of an insect in a spatial plane in which an insect is located at a particular time. Vick '942 does not teach or suggest, for example, generating a characteristic parameter to allow discrimination between one insect and another insect both occupying the same spatial plane, nor does Vick '942 teach or suggest identifying an insect at a first time and then identifying the same insect again at a later, second time. Vick '942 describes only spatially distinguishing between different insects to the extent that the insects occupy different spatial planes discernible by the device.

In the current Office action, the Examiner states that, "Regarding claims 18, 20, 48, 49, 52, 53 none of the references include the detection of the scent or hair color as the additional signal, however these limitations are considered an obvious matter or design choice since the Applicant did not disclose that having these limitations solve any stated problems..."

Applicants respectfully traverse the Examiner's statement above. In the current application, scent and hair color serve to more precisely identify and distinguish individual persons entering and leaving a vehicle to help determine, for example, when a particular individual person exits a bus after having entered the bus.

In view of at least the foregoing, it is respectfully submitted that independent claim 1 defines allowable subject matter. Since claims 2-20 and 22-53 depend either directly or indirectly from claim 1, it is respectfully submitted that dependent claims 2-20 and 22-53 define allowable subject matter as well.

It is also respectfully submitted that new independent claim 54 defines allowable subject matter. Support for this claim is found in Fig. 4 and paragraphs [0042] and [0043] of the specification.

Accordingly, the applicant respectfully requests reconsideration of the rejections based on the arguments made above. After such reconsideration, it is urged that allowance of all claims will be in order.

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Although the undersigned attorney is now resident in the Columbus, Ohio, office of the firm, all written correspondence should continue to be directed to the firm's Akron, Ohio, address provided below.

Respectfully submitted,



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